

REMARKS

Claims 1-6, 10-17, 19, 25-34, and 38-52 are pending.

Claims 1-6, 10-17, 19, 25-34, and 38-52 have been rejected.

Claims 1-6 are currently cancelled.

Claims 10, 12, 14, 29, 38, and 48 are currently amended.

1. OBJECTION TO CLAIM 10

Claim 10 stands objected to because of a typographical error related to the term "includes a." Claim 10 is currently amended to correct the typographical error.

2. OBJECTION TO THE SPECIFICATION

The disclosure stands objected to because of a typographical error related to tag references "164" and "166." Without adding new matter, the typographical errors are currently corrected in the Specification so that the "source tag portion" is identified as item 164 and "target operand portion" is identified as item 166. A replacement paragraph appears on page 2.

3. DOUBLE PATENTING REJECTIONS

Claims 1-6 and 10 stand rejected as unpatentable due to double patenting of claim 1 of United States Patent No. 6,308,260 ("the '260 patent"). *See* Office Action mailed 03/30/2005, ¶ 5. Claim 1-6 are currently cancelled. Claim 10 is currently rewritten in independent form to include the limitations of the claims from which it depended. The subject matter of amended claim 10 is distinguishable from the subject matter of claim 1 of the '260 patent. Claim 10 recites, "said second data value being operable for setting in response to an issuing instruction." In contrast, claim 1 of the '260 patent recites, "said second data value being operable for setting in response to said broadcast first operand tag." Further, as amended, claim 10 recites, "said first portion comprising a link mask and said first link data value indicating to a target instruction which of the queue's plurality of entries that a dispatching dependent instruction will occupy." The subject matter of claim 1 of the '260 patent is patentably distinguishable from the subject

matter of amended claim 10 in the current application. Therefore, with regard to double patenting, claim 10 is allowable over the '260 patent.

In addition to claim 10 being patentable over the '260 patent due to distinguishable subject matter, claim 10 is patentable because the Examiner has failed to establish a prima facie case. *See* Office Action mailed 03/30/2005, paragraph 5. The Examiner states that the claim in the instant application and claim 1 from the '260 patent "comprise substantially the same elements." *See id.* The Examiner has not established a prima facie case of nonstatutory double patenting by showing the relevant claims cannot be literally infringed without literally infringing one another. *See In re Vogel*, 422 F.2d 438 (C.C.P.A. 1970). Therefore, because the subject matter of claim 10 is distinguishable and because the Examiner's rejection lacks the necessary literal infringement analysis, Applicants respectfully request that the rejection of claim 10 be withdrawn.

4. REJECTIONS UNDER 35 U.S.C. § 102

Claims 1-6, 10-17, 19, 25-34, and 38-52 stand rejected under 35 U.S.C. 102(e) as anticipated by *Cheong* (U.S. patent 5, 913,048). Claims 1-6 are currently cancelled without prejudice and the limitations of each of claims 1-6 are added to amended claim 10. Claims 10, 12, 14, 29, 38, and 48 are currently amended. Any remaining rejections of claims 10-17, 19, 25-34, and 38-52 are traversed.

A claim is anticipated only if every element as set forth in the claim is found in a single prior art reference. MPEP § 2131. An anticipating reference must describe the patented subject matter with sufficient clarity and detail to establish that the subject matter existed and that its existence was recognized by persons of ordinary skill in the field of the invention. *ATD Corp. v. Lydall, Inc.*, 159 F.3d 534, 545 (Fed. Cir. 1998). Further, there must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention. *Scripps Clinic & Research Foundation v. Genentech, Inc.*, 927 F.2d 1565, 1576 (Fed. Cir. 1991).

As amended claim 10 recites, "said first portion comprising a link mask and said first link data value indicating to a target instruction which of the queue's plurality of entries that a dispatching dependent instruction will occupy." *Cheong* does not disclose any "link mask." Nor

does *Cheong* disclose "first link data value indicating to a target instruction which of a queue's plurality of entries that a dispatching dependent instruction will occupy." It is improper to equate the *Cheong's* TID (Figure 3) to the link mask field (pending application, items 426 and 432, Figure 4A). As shown in Figure 4A, the link mask 426 is a unique vector with the depth of "*n*," where *n* is the number of entries of the issue queue (ISQ). See Specification, page 17 line 7. *Cheong's* TID is not associated with the issue queue. In operation, the *Cheong's* TID is the tag of the target that is updated by the instruction. Also, *Cheong's* TID is a number assigned to the instruction at dispatch. The link mask 426 (pending application, Figure 4A) does not identify the target of the instruction, it identifies which other entries in the ISQ have the RA (item 424) and RB (item 430) that depend on the instruction at the relevant location. See Figure 4A, pending application. When the instruction in this location is issued or broadcasted, the link mask vectors 426 and 432 are used to update all W bits 428 and 436, without using the TID compare function as disclosed in *Cheong*. Therefore, the disclosure of *Cheong* is distinguishable from the subject matter of the pending application and claim 10 is patentable. Claims 11-13 depend from claim 10 and therefore recite the limitations of claim 10. For the reasons stated above with regard to claim 10, claims 11-13 are allowable over *Cheong*.

Accordingly, because the present inventor derived the disclosed features of *Cheong*, the disclosed features are not "by another." Further, the disclosed features are not claimed in the present application and are distinguishable from the subject matter of the pending claims. Therefore, claim 10 is patentable over *Cheong*. Claims 11-13 depend from claim 10 and therefore recite the limitations of claim 10. For the reasons stated above with regard to claim 10, claims 11-13 are allowable over *Cheong*.

Claim 14 is rejected "for the same reasons set forth in claim 1 above." Claim 14 recites "wherein said first queue entry is preselected in a response to a first data value in a second portion of a preselected second queue entry."

The cited portion of *Cheong* does not disclose that any first queue entry (first portion) is preselected in response to a first data value (second portion) in a second portion of a preselected second queue entry. See *Cheong*, col. 11, lines 30-45. Instead, the cited portion discloses that if a TID being broadcast matches the TID value in 128a (first portion), the broadcast value is

copied into the 126a field (second portion) and the 124a field (first portion) is set. *See Cheong*, col. 11, lines 40-45. Further, *Cheong* does not disclose "wherein the first portion comprises a link mask and a first link data value indicating to a target instruction which of the queue's plurality of entries that a dispatching dependent instruction will occupy." Therefore, *Cheong* does not disclose every limitation of amended claim 14 and claim 14 is allowable. Further, claim 14 is allowable for the same reasons set forth with regard to claim 10 (which incorporates claim 1). Claims 15-17, 19, and 25-28 depend from claim 14 and therefore recite the limitations of claim 14. For the reasons stated above with regard to claim 14, claims 15-17, 19, and 25-28 are allowable over *Cheong*.

Claim 29 stands rejected over *Cheong* "for the same reasons set forth in claim 1 above." Claim 29 recites limitations similar to those in amended claim 10 (from claim 1). Therefore, for the reasons set forth with regard to claim 10 (which incorporates the limitations of claim 1), claim 29 is allowable. Claims 30-34 depend from claim 29 and recite the limitations of claim 29. Therefore, claims 30-34 are allowable over *Cheong*.

Claim 38 stands rejected as anticipated by *Cheong*. The cited portions do not disclose every element of claim 38. The Examiner cites to Figure 3's item 118 as disclosing claim 38's "second portion." The Examiner cites to Figure 3's item 120 as disclosing claim 38's "first portion." The cited portions do not disclose that, for an instruction corresponding to a first entry having a value of said instruction operand determined by an instruction corresponding to a second entry, said link value in said second entry comprises a value corresponding to a number of said first entry. Further, *Cheong* does not disclose, "wherein the second portion comprises a link mask, and the link value indicates to a target instruction which of the issue queue's plurality of entries that a dispatching dependent instruction will occupy." Therefore, *Cheong* does not disclose every limitation of claim 38. Further, claim 38 is allowable for the same reasons discussed with regard to claim 10. Claims 39-44 depend from claim 38. For the reasons stated above with regard to claim 38, claims 39-44 are patentable over *Cheong*.

Claim 45 stands rejected as anticipated by *Cheong*. The cited portions of *Cheong* do not disclose every element of claim 45. As disclosing the "setting a predetermined value in a first portion of an entry in an instruction queue corresponding to a first instruction in response to a

dispatch of a second instruction," the Examiner cites to *Cheong's* disclosure of determining whether the predicted outcomes match the actual outcomes. *Cheong*, col. 15, lines 29-31. Claim 45's setting a predetermined value is distinguishable from *Cheong's* determining whether the predicted value outcomes match the actual outcomes and consequently marking the branch instructions "done" in the interrupt stack. Therefore, *Cheong* does not disclose every limitation of claim 45 and claim 45 is patentable over *Cheong*. Further claim 45 is allowable for the same reasons discussed with regard to claim 10. Claims 46-47 depend from claim 45. For the reasons stated above with regard to claim 45, claims 46-47 are patentable over *Cheong*.

Claim 48 stands rejected as anticipated by *Cheong* "for the same reasons set forth in claims 1 and 29." Therefore, for the reasons stated above with regard to claims 1 and 29, independent claim 48 and dependent claims 49-52 are patentable over *Cheong*.

II. CONCLUSION

Claims 1-6 are currently cancelled. Claims 10, 12, 14, 29, 38, and 48 are allowable as amended. Any remaining rejections regarding the claims are traversed. All remaining claims are in condition for allowance.

Applicants respectfully request that the Examiner call Applicant's attorney at the below listed number if the Examiner believes that such a discussion would be helpful in resolving any remaining problems.

Respectfully submitted,
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